

# DMOPC '16 Contest 2 P3 - Queries

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**Time limit:** 0.6s    **Memory limit:** 64M

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You receive  $M$  queries with the form of  $(x, y)$ . Find a sequence of size  $N$ , formed with `a`'s and `b`'s where you must "find" each query. A query is found if you can find a substring with  $x$  `a`'s and  $y$  `b`'s.

## Input Specification

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On the first line you will find the number of test cases,  $T$  ( $1 \leq T \leq 50$ ).

For each test case, you will find on the first line  $N$  and  $M$  ( $1 \leq N \leq 50, 1 \leq M \leq 500$ ).

On the next  $M$  lines, you will find the queries with the space-separated integers  $x$  and  $y$ .

## Output Specification

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For each test case, print a sequence which respects the requirement. If you can't find a sequence, print `-1`.

## Sample Input

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```
1
7 2
4 2
3 3
```

## Sample Output

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```
abaabab
```